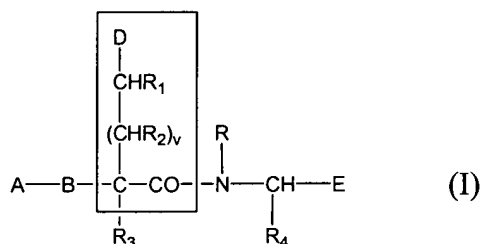


Listing of Claims:

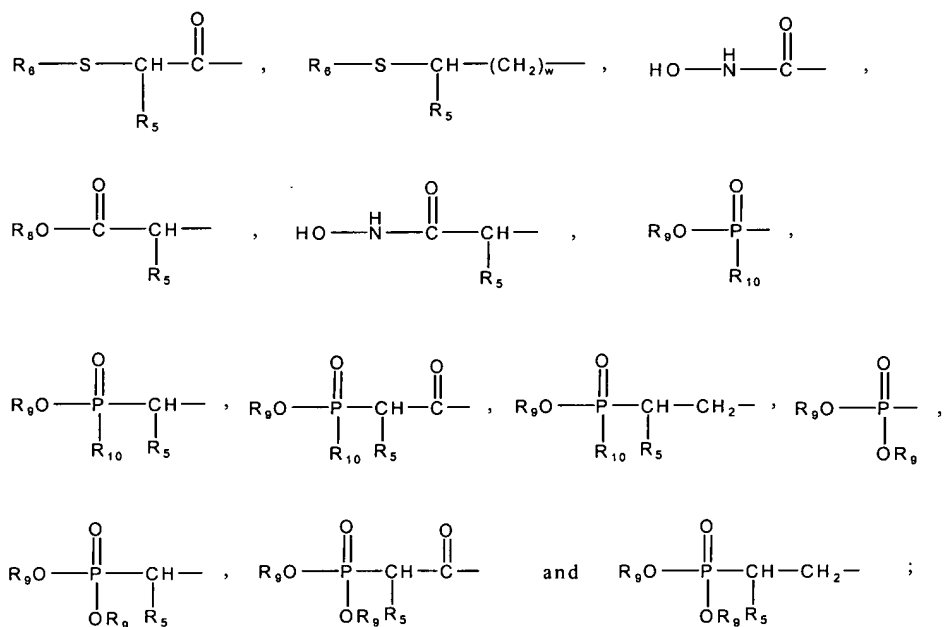
This listing of claims will replace all prior versions and listings of claims in the application:

- (original): A compound comprising Formula (I), or a pharmaceutically acceptable salt thereof:



wherein

A is a zinc ligand or zinc ligand bearing moiety selected from the group consisting of:



B is $\text{---}\underset{\text{R}_{11}}{\underset{|}{\text{N}}}\text{---}$, $\text{---CH}_2\text{---}$ or absent ;

R is hydrogen or lower alkyl;

R₁ is hydrogen or lower alkyl;

R₂ is hydrogen, or lower alkyl;

R₃ is hydrogen or lower alkyl;

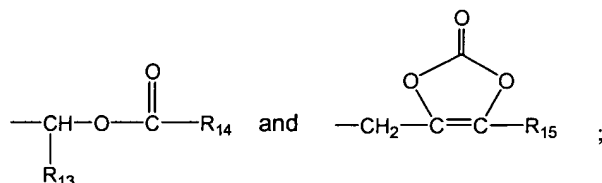
R₄ is lower alkyl, substituted lower alkyl, cycloalkyl-(CH₂)_w-, aryl-(CH₂)_w-, substituted aryl-(CH₂)_w- or heteroaryl-(CH₂)_w-;

R₅ is hydrogen, lower alkyl, substituted lower alkyl, cycloalkyl-(CH₂)_x-, aryl-(CH₂)_x-, substituted aryl-(CH₂)_x-, or heteroaryl-(CH₂)_x-;

R₆ is hydrogen, R₇-CO-, or R₁₂-S-;

R₇ is alkyl, substituted alkyl, cycloalkyl-(CH₂)_y-, aryl-(CH₂)_y-, substituted aryl-(CH₂)_y- or heteroaryl-(CH₂)_y-;

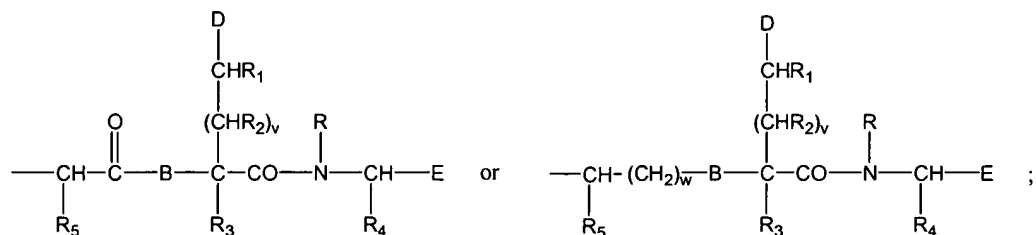
R₈ and R₉ are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl-(CH₂)_y-, substituted aryl-(CH₂)_y-, heteroaryl-(CH₂)_y-,



R₁₀ is alkyl, substituted alkyl, cycloalkyl-(CH₂)_y-, aryl-(CH₂)_y-, substituted aryl-(CH₂)_y- or heteroaryl-(CH₂)_y-;

R₁₁ is hydrogen or lower alkyl;

R₁₂ is alkyl, substituted alkyl, cycloalkyl-(CH₂)_y-, aryl-(CH₂)_y-, substituted aryl-(CH₂)_y-, heteroaryl-(CH₂)_y-,



in which case -S-R₁₂ completes a symmetrical disulfide;

R₁₃ is hydrogen, lower alkyl, cycloalkyl or phenyl;

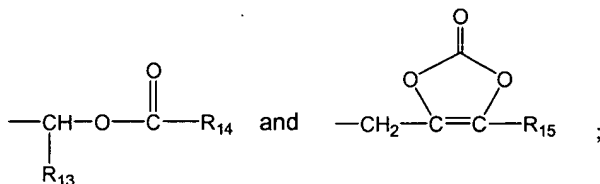
R₁₄ is hydrogen, lower alkyl, lower alkoxy or phenyl;

R₁₅ is lower alkyl or aryl-(CH₂)_y-;

D is -COOH, -SO₂H, -SO₃H, -PO₃H₂; -OSO₃H or -OPO₃H₂;

E is hydrogen, R₁₂, -COOH, -CONH₂, -CONH(lower alkyl), -CON(lower alkyl)₂,
-CONH-(CH₂)_z-aryl, -CON(-(CH₂)_z-aryl)₂, -CO-amino acid, -CH₂COOH,
CH₂OH, -CH₂CH₂OH, or -COOR₁₆;

R₁₆ is selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl-
(CH₂)_y-, substituted aryl-(CH₂)_y-, heteroaryl-(CH₂)_y-,



C is carbon;

H is hydrogen;

O is oxygen;

N is nitrogen;

S is sulfur;

P is phosphorus;

v is zero or one;

w is zero or an integer ranging from 1 to 4;

x is an integer ranging from 1 to 4;

y is zero or an integer ranging from 1 to 6; and

z is zero, one, two, or three.

2. (original): The compound of claim 1, wherein R₁, when v=1, is connected to the carbon bearing R₂ to form an alkylene bridge of 1 carbon atom, representing with the carbon atom to which it is attached a cyclopropane ring.

3. (original): The compound of claim 1, wherein R_2 , when $v=1$, is connected to the carbon bearing R_1 to form an alkylene bridge of 1 carbon atom representing with the carbon atom to which it is attached a cyclopropane ring.
4. (original): The compound of claim 1, wherein R_1 , when $v=1$, is connected to the carbon bearing R_3 to form an alkylene bridge of 1 carbon atom, representing with the carbon atom to which it is attached a cyclobutane ring.
5. (original): The compound of claim 1, wherein R_3 , when $v=1$, is connected to the carbon bearing R_1 to form an alkylene bridge of 1 carbon atom, representing with the carbon atom to which it is attached a cyclobutane ring.
6. (original): The compound of claim 1, wherein R_1 and R_3 , when $v=1$, are connected together to form an alkylene bridge of 2 carbon atoms representing with the carbon atoms to which they are attached a cyclopentane ring.
7. (original): The compound of claim 1, wherein R_1 and R_3 , when $v=0$, are connected together to form an alkylene bridge of 3 carbon atoms representing with the carbon atoms to which they are attached a cyclopentane ring.
8. (original): The compound of claim 1, wherein R_1 and R_3 , when $v=0$, are connected together to form an alkylene bridge of 4 carbon atoms representing with the carbon atoms to which they are attached a cyclohexane ring.
9. (original): The compound of claim 1, wherein R_1 and R_3 , when $v=1$, are connected together to form an alkylene bridge of 3 carbon atoms representing with the carbon atoms to which they are attached a cyclohexane ring.
10. (original): The compound of claim 1, wherein R and R_4 are connected together to form an alkylene bridge of 3 carbon atoms representing with the nitrogen and carbon atoms to which they are attached a pyrrolidine ring.

11. (original): The compound of claim 1, wherein R and R₄ are connected together to form an alkylene bridge of 4 carbon atoms representing with the nitrogen and carbon atoms to which they are attached a piperidine ring.
12. (original): The compound of claim 1, wherein R₁ and R₁₁, when v=0, are connected together to form an alkylene bridge of 3 carbon atoms representing with the nitrogen and carbon atoms to which they are attached a piperidine ring.
13. (original): The compound of claim 1, wherein R₁ and R₁₁, when v=1, are connected together to form an alkylene bridge of 2 carbon atoms representing with the nitrogen and carbon atoms to which they are attached a piperidine ring.
14. (original): The compound of claim 1, wherein R₂ and R₁₁, when v=1, are connected together to form an alkylene bridge of 2 carbon atoms representing with the nitrogen and carbon atoms to which they are attached a pyrrolidine ring; the alkylene bridge may be substituted by a lower alkyl or alkenyl group at either carbon.
15. (original): The compound of claim 1, wherein R₁₁ is hydrogen or lower alkyl and wherein the carbon bearing R₁ and the nitrogen bearing R₁₁, when v=1, are directly connected together to form an azetidine ring.
16. (original): The compound of claim 1, wherein the compound is further defined as N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-acetylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-3-phenyl-propionyl amino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-propionylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-4-methyl-pentanoylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-3-methyl-butyrylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(3-hydroxy-2-mercapto-propionylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(3-hydroxy-2-mercapto-butyrylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-

yl)-ethyl]-3-(2-mercapto-hexanoylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-4-phenyl-butyrylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-2-phenyl-acetylamino)-succinamic acid, 3-(3-Biphenyl-4-yl-2-mercapto-propionylamino)-N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-succinamic acid, 3-(3-(4-Benzoyloxy-phenyl)-2-mercapto-propionylamino)-N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-[3-(4-fluoro-phenyl)-2-mercapto-propionylamino]-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-[2-mercapto-3-(4-methoxy-phenyl)-propionylamino]-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(3-cyclohexyl-2-mercapto-propionylamino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-[3-(1H-indol-3-yl)-2-mercapto-propionylamino]-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-3-naphthalen-2-yl-propionylamino)-succinamic acid, N-(1-Carboxy-2-naphthalen-2-yl-ethyl)-3-(2-mercapto-3-phenyl propionylamino)-succinamic acid, N-(1-Carboxy-2-hydroxy-ethyl)-3-(2-mercapto-3-phenyl-propionyl amino)-succinamic acid, N-[1-Carboxy-2-(4-hydroxy-phenyl)-ethyl]-3-(2-mercapto-3-phenyl-propionylamino)-succinamic acid, N-[1-Carboxy-2-phenyl-ethyl]-3-(2-mercapto-3-phenyl-propionyl amino)-succinamic acid, N-(2-Biphenyl-4-yl-1-Carboxy-ethyl)-3-(2-mercapto-3-phenyl-propionyl amino)-succinamic acid, N-(1-Benzyl-2-hydroxy-ethyl)-3-(2-mercapto-3-phenyl-propionyl amino)-succinamic acid, N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-3-phenyl-propionylamino)-succinamic acid, 4-[1-Carboxy-2-(1H-indol-3-yl)-ethylcarbamoyl]-4-(2-mercapto-3-phenyl-propionylamino)-ethyl]-butyric acid, N-[2-(1H-indol-3-yl)-methylcarbamoyl-ethyl]-3-(2-mercapto-acetyl amino)-succinamic acid, N-[1-(1-Carboxy-2-hydroxy-ethylcarbamoyl)-2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-3-phenyl-propionylamino)-succinamic acid, N-[2-(1H-indol-3-yl)-methoxycarbonyl-ethyl]-3-(2-mercapto-acetyl amino)-succinamic acid, N-[2-(1H-indol-3-yl)-ethyl]-3-(2-mercapto-3-phenyl-propionylamino)-succinamic acid, 3-(2-Biphenyl-4-yl-ethylcarbamoyl)-4-hydroxycarbamoyl-butyric acid, 3-[2-(4'-Cyano-biphenyl-4-yl)-ethylcarbamoyl]-4-hydroxycarbamoyl-butyric acid, 4-Hydroxycarbamoyl-3-[2-(4-pyridin-2-yl-phenyl)-ethylcarbamoyl]-butyric acid, 4-Hydroxycarbamoyl-3-(4-phenyl-butylcarbamoyl)-butyric acid, 4-Hydroxycarbamoyl-3-(2-phenoxy-ethylcarbamoyl)-butyric acid, 3-[2-(4'-Hydroxy-biphenyl-4-yl)-ethylcarbamoyl]-4-hydroxycarbamoyl-

butyric acid, 3-(2,2-Diphenyl-ethylcarbamoyl)-4-hydroxycarbamoyl-butyric acid, 3-[2-(4'-Dimethylamino-biphenyl-4-yl)-ethylcarbamoyl]-4-hydroxycarbamoyl-butyric acid, 4-Hydroxycarbamoyl-3-(5-hydroxy-pentylcarbamoyl)-butyric acid, 3-[(Biphenyl-4-ylmethyl)-carbamoyl]-4-hydroxycarbamoyl-butyric acid, 3-(2-Biphenyl-4-yl-ethylcarbamoyl)-5-hydroxycarbamoyl-pentanoic acid, N-[1-carboxy-2-(1H-indol-3-yl)-ethyl]-3-(3-phenyl-1-phosphono-propylamino)-succinic acid, or 3-(2-Naphthalen-2-yl-ethylcarbamoyl)-pentanedioic acid.

17. (original): The compound of claim 16, wherein the compound is further defined as 3-(2-Biphenyl-4-yl-ethylcarbamoyl)-4-hydroxycarbamoyl-butyric acid.
18. (original): A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and a physiologically acceptable carrier or excipient.
19. (original): The pharmaceutical composition of claim 18, wherein the compound of claim 1 is further defined as a compound of claim 16.
20. (original): The pharmaceutical composition of claim 18, wherein the compound of claim 1 is further defined as the compound of claim 17.
21. (original): A method for inhibiting PHEX comprising contacting PHEX with an inhibitory amount of a compound of claim 1.
22. (original): The method of claim 21, wherein the compound of claim 1 is further defined as the compound of claim 16.
23. (original): The method of claim 21, wherein the compound of claim 1, is further defined as the compound of claim 17.
24. (original): A method for stimulating bone mass formation in a mammal comprising inhibiting PHEX with an effective amount of a compound of 1.

25. (original): The method of claim 24, wherein the compound of claim 1 is further defined as the compound of claim 16.
26. (original): The method of claim 24, wherein the compound of claim 1 is further defined as the compound of claim 17.
27. (original): A method for treating or preventing a disease or condition associated with a phosphate metabolism defect comprising administering an effective amount of a compound of claim 1 to a mammal in need thereof.
28. (original): The method of claim 27, wherein said disease or condition is selected from the group consisting of hyperphosphatemia, hyperparathyroidism, and renal insufficiencies.
29. (original): The method of claim 27, wherein the compound of claim 1 is further defined as the compound of claim 16.
30. (original): The method of claim 27, wherein the compound of claim 1 is further defined as the compound of claim 17.
31. (original): A method for identifying a PHEX substrate comprising:
- (a) contacting a candidate with PHEX in the presence and in the absence of a compound of claim 1; and
 - (b) assessing PHEX biological activity of the candidate in the presence and absence of the compound,
- wherein the candidate compound is selected as a PHEX substrate when PHEX biological activity is measurably higher in the absence versus in the presence of the compound.
32. (original): The method of claim 31, wherein the compound of claim 1 is further defined as the compound of claim 16.

33. (original): The method of claim 31, wherein the compound of claim 1 is further defined as the compound of claim 17.